

PATENT COOPERATION TREATY

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NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C.20231
ÉTATS-UNIS D'AMÉRIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 06 January 2000 (06.01.00)	
International application No. PCT/US99/10603	Applicant's or agent's file reference 8993/94
International filing date (day/month/year) 13 May 1999 (13.05.99)	Priority date (day/month/year) 15 May 1998 (15.05.98)
Applicant DENT, Paul, W. et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

02 December 1999 (02.12.99)

☐ in a notice effecting later election filed with the International Bureau on:
2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer</p> <p style="text-align: center;">Sean Taylor</p> <p>Telephone No.: (41-22) 338.83.38</p>
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PATENT COOPERATION TREATY

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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 8993/94	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 99/ 10603	International filing date (day/month/year) 13/05/1999	(Earliest) Priority Date (day/month/year) 15/05/1998
Applicant ERICSSON, INC. et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

SIGNAL DECODING WITH OR WITHOUT SECOND SYNCHRONIZATION WORD IN A MOBILE COMMUNICATION SYSTEM

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

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☐ None of the figures.

INTERNATIONAL SEARCH REPORT

national Application No

PCT/US 99/10603

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 H04J3/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 H04B H04J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 27 39 978 A (TEKADE FELTEN & GUILLEAUME) 15 March 1979 (1979-03-15) page 3, line 7 - line 21 page 4, line 12 - line 19 page 5, line 15 - line 25 figures 1,2	1-25
A	EP 0 269 974 A (IBM) 8 June 1988 (1988-06-08) column 4, line 6 - line 11 figure 2	1-25
A	EP 0 594 551 A (ERICSSON GE MOBILE COMMUNICAT) 27 April 1994 (1994-04-27) cited in the application column 1, line 10 - line 28 column 5, line 16 - line 36 figure 2B	1-25

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

31 August 1999

Date of mailing of the international search report

07/09/1999

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Larcinese, A

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/10603

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
DE 2739978	A	15-03-1979	NONE		

EP 0269974	A	08-06-1988	US	4847877 A	11-07-1989
			JP	1763633 C	28-05-1993
			JP	4052019 B	20-08-1992
			JP	63142742 A	15-06-1988

EP 0594551	A	27-04-1994	US	5335250 A	02-08-1994
			AU	5446394 A	09-05-1994
			CN	1100579 A	22-03-1995
			SG	43305 A	17-10-1997
			WO	9409582 A	28-04-1994
			US	5841816 A	24-11-1998

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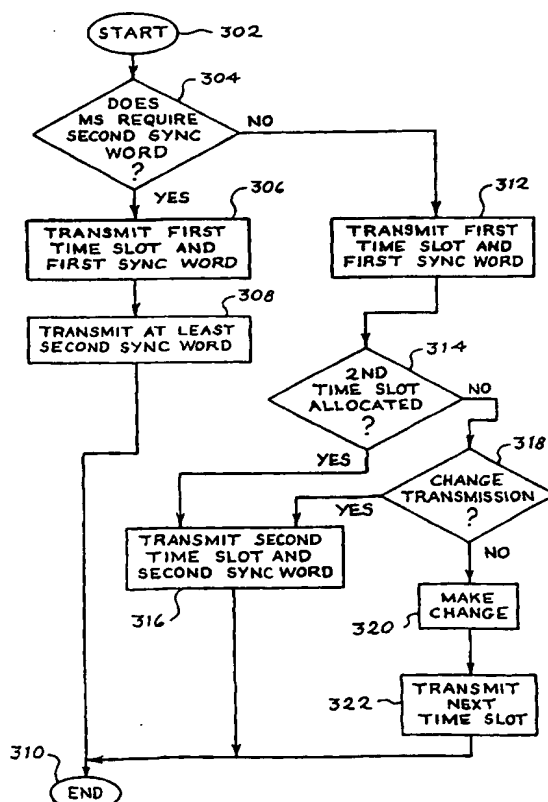
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H04J 3/06		(11) International Publication Number: WO 99/60737
A1		(43) International Publication Date: 25 November 1999 (25.11.99)
<p>(21) International Application Number: PCT/US99/10603</p> <p>(22) International Filing Date: 13 May 1999 (13.05.99)</p> <p>(30) Priority Data: 60/085,710 15 May 1998 (15.05.98) US</p> <p>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/085,710 (CIP) Filed on 15 May 1998 (15.05.98)</p> <p>(71) Applicant (for all designated States except US): ERICSSON, INC. [US/US]; 7001 Development Drive, Research Triangle Park, NC 22709 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): DENT, Paul, W. [GB/GB]; 637 Eagle Point Road, Pittsboro, NC 27312 (US). RATH, Krister [SE/SE]; 805-A Park Ridge, Durham, NC 27713 (US).</p> <p>(74) Agent: RAUCH, John, G.; Brinks Hofer Gilson & Lione, P.O. Box 10087, Chicago, IL 60610 (US).</p>		
<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p>		

(54) Title: SIGNAL DECODING WITH OR WITHOUT SECOND SYNCHRONIZATION WORD IN A MOBILE COMMUNICATION SYSTEM

(57) Abstract

A time division multiple access (TDMA) radio communication system (100) accommodates signal decoding by a mobile station (130) with and without a second synchronization word (214). The radio communication system includes at least one base station (102, 104) to transmit radio signals during a succession of time slots (202, 204, 206) including a current time slot (202) and a subsequent time slot (204). The radio signals include an indication of whether transmission of the subsequent time slot is guaranteed. The system further includes at least one mobile station to receive the radio signals in accordance with the indication.



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INTERNATIONAL SEARCH REPORT

Inter. Patent Application No

PCT/US 99/10603

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IPC 6 H04J3/06

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INTERNATIONAL SEARCH REPORT

information on patent family members

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		JP 1763633 C	28-05-1993
		JP 4052019 B	20-08-1992
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		AU 5446394 A	09-05-1994
		CN 1100579 A	22-03-1995
		SG 43305 A	17-10-1997
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		US 5841816 A	24-11-1998